UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,101	10/23/2001	Stephen L. Buchwald	MTV-014.03	3983

25181 7590 09/13/2002

FOLEY HOAG LLP
PATENT GROUP, WORLD TRADE CENTER WEST
155 SEAPORT BOULEVARD
BOSTON, MA 02110-2600

EXAMINER	
SACKEY, EBENEZER O	

ART UNIT	PAPER NUMBER
1626	7

DATE MAILED: 09/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/004,101	BUCHWALD ET AL.
Examiner	**Art Unit**
EBENEZER SACKEY	1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *10/23/01 AND 6/17/02 RESPECTIVELY*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-87* is/are pending in the application.

4a) Of the above, claim(s) *1-8, 13-40, and 53-77* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *9-12, 41-52 AND (78-87 in part)* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I

Claims 1-4 are, directed to compounds of structure 1, classified in various classes and subclasses.

Group II

Claims 5-8 are, drawn to compounds of structure 2, classified in various classes and subclasses.

Group III

Claims 9-12 are, drawn to compounds of structure 3, classified in various classes and subclasses.

Group IV

Claims 13-14 are, drawn to compounds of structure 4, classified in class 556, subclass 413+.

Group V

Claims 15-16 are, drawn to compounds of structure 5, classified in class 556, subclass 413+.

Group VI

Claims 17-18 are, drawn to compounds of structure 6, classified in class 556, subclass 413+.

Group VII

Claims 19-20 are, drawn to compounds of structure 7, classified in class 556, subclass 413+.

Group VIII

Claims 21-40 and 78-87 are, drawn to methods of preparing as defined by scheme I, classified in various classes and subclasses.

Group IX

Claims 41-52 and 78-87 are, drawn to methods of preparing as defined by scheme 2, classified in various classes and subclasses.

Group X

Claims 53-64 and 78-87 are, drawn to methods of preparing as defined by scheme 3, classified in various classes and subclasses.

Group XI

Claims 65-77 and 78-87 are, drawn to methods of preparing as defined by scheme 3, classified in various classes and subclasses.

2. The inventions are distinct, each from the other because of the following reasons:

The above groups are identified as general areas. Each group is independent or distinct as the products of groups I-VII are capable of preparation by more than one process (as note the instant specification) and are capable of more than one use (as note the instant specification). The products of Groups I-VII and VIII-XI differ materially in structure and in element so as to be patentably distinct. Different reactive steps, reactants are involved in each of Groups VIII-XI.

Additionally, besides performing a class/subclass search, the examiner performs a commercial data base search and an automated patent system

(text) search. Moreover, to not restrict would impose a burden in the examination of this application.

The above groups themselves are inclusive of patentably distinct subject matter. Accordingly, along with the election of one of the above groups, the following action is also taken.

Claims 1-87 are generic to plurality of disclosed patentably distinct species comprising for example, the compounds designated as (1) example 1, (2) example 4, (3) example 43 etc. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Upon the election of a single disclosed species, a generic concept inclusive of the elected species will be identified by the Examiner for examination along with the elected species. If claims are added after election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

3. During a telephone conversation with Dana Gordon on 8/27/02 a provisional election was made with traverse to prosecute the invention of Group 3, species of Example 16, compound number 27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-8, 13-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. The corresponding method of preparing (scheme 2, in part) will be rejoined if commensurate in scope.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims

subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

5. The withdrawn subject matter will be properly restricted as said subject matter differs in structure and element from the elected subject matter so as to be patentably distinct therefrom, i.e., a reference which anticipated only the elected subject matter would not even render obvious the withdrawn subject matter.

Accordingly, the claims are drawn to more than a single invention and restriction as has been required is proper, 37 CFR 1.142(a).

Due to the shear vastness of the subject matter of claims 9-12 i.e., (the claims that read on the elected embodiment) the following generic concept of claim 9 wherein one of X and Y is PR_2, and the other is NR_2, R through R_6 are independently hydrogen, halogen, alkyl, alkenyl and aryl is identified for examination along with the elected embodiment of Example 16. The remaining subject matter of claims 9-12 stands withdrawn 37 CFR 1.142(b) as being for non-elected inventions.

Claim Rejections - 35 U.S.C. § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 9 and dependent claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims above recite "---comprising---" in the claim language. Comprising is an open-ended word which allows the inclusion of unrecited elements. It is suggested that "comprising" be changed to --consisting--.

8. Claims 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
The identified claims above have defined [B: B'] (claim 9). However, [B: B'] has not been depicted on the structure in the identified claim.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985);

In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 9 and dependent claims 10-12, 41-52 and (78-87 in part) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-5,('916') and claims 1, 9 and 17-19 of ('087') respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is considerable overlap between the instant application and the patents.

The differences between the instant claims and '087' and '916' reside in the substituents. See for example when X and Y are NR_2 and PR_2 where R_2 is alkyl and/or cycloalkyl or aryl. The instantly claimed compounds (i.e., ligands) would have been obvious because one skilled in the art would have been motivated to either prepare compounds embraced by the reference genuses or homologs of the compounds taught in the references to arrive at the instantly claimed compounds with the expectation that the obtained compounds would have similar activity to that which is taught by the references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (703) 305-6889. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (703) 308-4537. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

EOS

August 29, 2002

Deborah Lambkin for

Joseph K. McKane

Supervisory Patent Examiner

Art Unit 1626, Group 1600

Technology Center 1